

AMENDMENTS TO THE CLAIMS

Claims 1-8 (Cancelled)

9. (Currently amended) A method for manufacturing a semiconductor device, comprising:

providing a manufacturing apparatus in an external environment;

positioning said manufacturing apparatus adjacent to a partition wall partitioning said external environment from a clean room;

isolating from said external environment a closed space that is defined by an enclosing structure of said manufacturing apparatus;

supplying a semiconductor wafer from said clean room to said closed space of said manufacturing apparatus through an opening defined in said partition wall;

maintaining a clean atmosphere within said closed space by operating a purifying system;

processing ~~a~~ said semiconductor wafer within said closed space by operating a processing device; and

maintaining an internal pressure of said closed space to be higher than a pressure in said external environment by operating a pressure elevating device; ~~and~~ and

returning said semiconductor wafer from said manufacturing apparatus to said clean room through said opening defined in said partition wall.

10. (Previously presented) The method according to claim 9, wherein said enclosing structure comprises a housing.

11. (Previously presented) The method according to claim 9, wherein said purifying system comprises a filter unit mounted on said enclosing structure, and further comprising supplying clean air into said closed space by operating said filter unit.

12. (Previously presented) The method according to claim 11, wherein maintaining the internal pressure of said closed space to be higher than the pressure in said external environment comprises operating a fan disposed in said filter unit and also operating a damper to control a rate at which air is discharged from said closed space.

13. (Previously presented) The method according to claim 9, wherein processing the semiconductor wafer comprises polishing said semiconductor wafer with a polishing device.

14. (Previously presented) The method according to claim 9, wherein processing the semiconductor wafer comprises polishing said semiconductor wafer in a polishing section to provide a polished semiconductor wafer and cleaning said polished semiconductor wafer in a cleaning section to provide a cleaned semiconductor wafer, and further comprising controlling an internal pressure of said cleaning section to be higher than an internal pressure of said polishing section.

15. (Previously presented) The method according to claim 14, further comprising:
receiving said semiconductor wafer in a loading/unloading section prior to polishing said semiconductor wafer;
receiving said cleaned semiconductor wafer in said loading/unloading section; and
controlling an internal pressure of said loading/unloading section to be higher than said internal pressure of said cleaning section.

16. (Previously presented) The method according to claim 14, wherein a partition having an opening partitions said cleaning section from said polishing section, and further comprising transferring said polished semiconductor wafer through said opening from said polishing section to said cleaning section.

17. (Currently amended) A method for processing a semiconductor wafer, comprising:
providing a processing apparatus in an external environment;
positioning said processing apparatus adjacent to a partition wall partitioning said external environment from a clean room;
supplying a semiconductor wafer from said clean room to a loading/unloading section of said processing apparatus through an opening defined in said partition wall;
polishing ~~a~~ said semiconductor wafer in a polishing section of ~~a~~ said processing apparatus to provide a polished semiconductor wafer;

controlling an internal pressure of said polishing section to be higher than a pressure exterior of said processing apparatus;

discharging said polished semiconductor wafer from said ~~polishing~~ loading/unloading section of said processing apparatus through ~~an unloading section~~ said opening defined in said partition wall;

and

controlling an internal pressure of said ~~unloading~~ loading/unloading section to be higher than said pressure exterior of said processing apparatus.

18. (Currently amended) The method according to claim 17, further comprising transferring said semiconductor wafer prior to being polished from said ~~unloading~~ loading/unloading section to said polishing section.

19. (Previously presented) The method according to claim 17, further comprising cleaning and then drying said polished semiconductor wafer in a cleaning section to provide a cleaned semiconductor wafer.

20. (Currently amended) The method according to claim 19, further comprising controlling said internal pressure of said ~~unloading~~ loading/unloading section to be higher than an internal pressure of said cleaning section.

21. (Previously presented) The method according to claim 19, further comprising controlling said internal pressure of said cleaning section to be higher than said internal pressure of said polishing section.

22. (Currently amended) The method according to claim 19, wherein said polishing section, said cleaning section and said ~~unloading~~ loading/unloading section are separated from each other by partitions, and further comprising:

transferring said semiconductor wafer prior to being polished from said ~~unloading~~ loading/unloading section to said polishing section through one of said partitions;

transferring said polished semiconductor wafer from said polishing section to said cleaning section through another of said partitions; and

transferring said cleaned semiconductor wafer from said cleaning section to said ~~unloading~~ loading/unloading section through said one of said partitions.

23. (Currently amended) A method for processing a semiconductor wafer, comprising:
providing a processing apparatus in an external environment;
positioning said processing apparatus adjacent to a partition wall partitioning said external environment from a clean room;

supplying a semiconductor wafer from said clean room to a loading/unloading section of said processing apparatus through an opening defined in said partition wall;

polishing a said semiconductor wafer in a polishing section of a said processing apparatus to provide a polished semiconductor wafer;

cleaning and then drying said polished semiconductor wafer in a cleaning section to provide a cleaned semiconductor wafer;

controlling an internal pressure of said cleaning section to be higher than a pressure exterior of said processing apparatus;

discharging said polished semiconductor wafer from said loading/unloading section of said processing apparatus through ~~an unloading section~~ said opening defined in said partition wall; and

controlling an internal pressure of said ~~unloading~~ loading/unloading section to be higher than said pressure exterior of said processing apparatus.

24. (Currently amended) The method according to claim 23, further comprising controlling said internal pressure of said ~~unloading~~ loading/unloading section to be higher than said internal pressure of said cleaning section.

25. (Currently amended) A method for manufacturing a semiconductor device, comprising:

providing a manufacturing apparatus in an external environment;

positioning said manufacturing apparatus adjacent to a partition wall partitioning said external environment from a clean room;

isolating from said external environment a closed space that is defined by an enclosing structure of said manufacturing apparatus;

supplying a semiconductor wafer from said clean room to said closed space of said manufacturing apparatus through an opening defined in said partition wall;

maintaining a clean atmosphere within said closed space by operating a purifying system;

processing ~~a~~ said semiconductor wafer within said closed space by operating a processing device; and

controlling an environment in said closed space to be cleaner than said external environment; and

returning said semiconductor wafer from said manufacturing apparatus to said clean room through said opening defined in said partition wall.

26. (Previously presented) The method according to claim 25, wherein said enclosing structure comprises a housing.

27. (Previously presented) The method according to claim 25, wherein said purifying system comprises a filter unit mounted on said enclosing structure, and further comprising supplying clean air into said closed space by operating said filter unit.

28. (Previously presented) The method according to claim 25, wherein processing the semiconductor wafer comprises polishing said semiconductor wafer with a polishing device.

29. (Previously presented) The method according to claim 25, wherein processing the semiconductor wafer comprises polishing said semiconductor wafer in a polishing section to provide a polished semiconductor wafer and cleaning said polished semiconductor wafer in a cleaning section.